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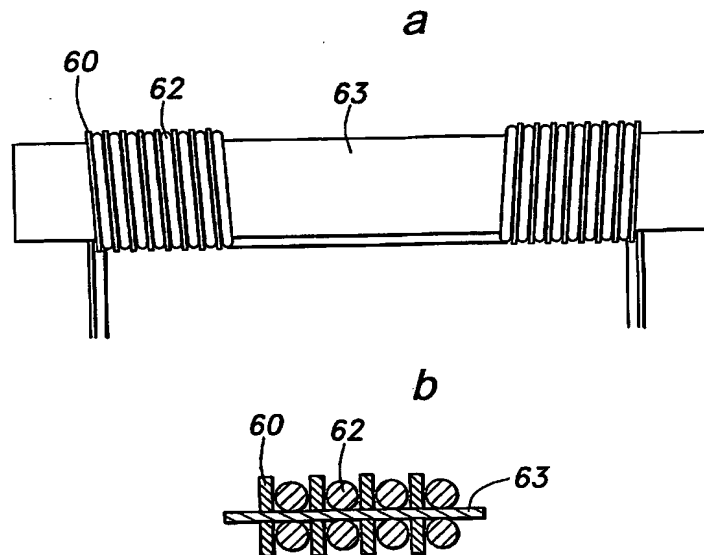
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(54) Title: **SLOTLESS ROTARY ELECTRIC MACHINE AND MANUFACTURING METHOD OF COILS FOR SUCH A MACHINE**



(57) Abstract: In a slotless permanent magnet rotary electric machinery, comprising a substantially cylindrical rotor (53) incorporated with a permanent magnet (52), a stator iron core (54) surrounding the rotor; and a coil (55) provided between the rotor (53) and stator core (54) in a spaced relationship with respect to the rotor (53), the coil (55) comprises a plurality of turns which are shifted from one turn to another along the circumferential direction in a mutually overlapping manner; and the coil turns are formed by a conductor (60, 60a, 60b) having an elongated cross section, a long axis of the cross section extending in a radial direction. This provides rotary electric machinery which can significantly reduce loss in a high speed range without substantially increasing copper loss.

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